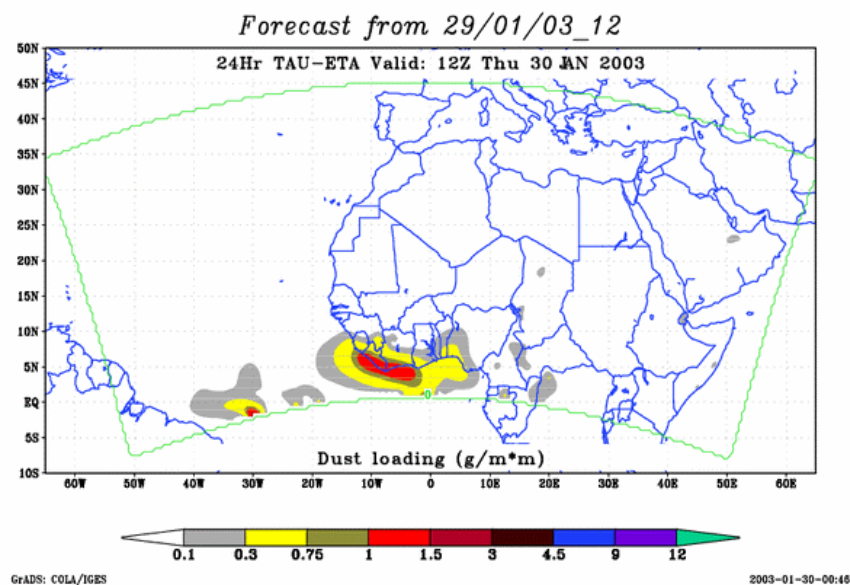


**Forecast for MEIDEX**

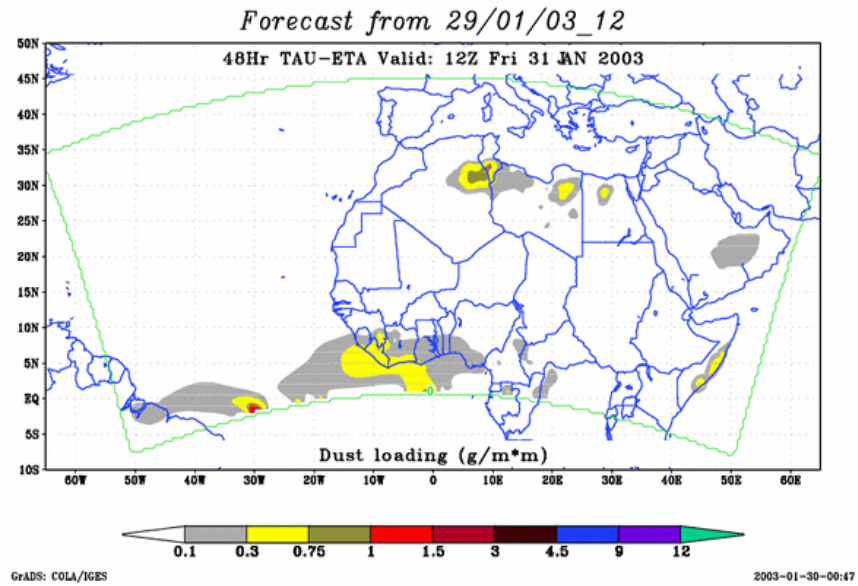
Date: 30 Jan 2003

**General:** "Yoav" cyclone has dissipated, and now "Yair" takes over. During 30-31 January "Yair" will deepen and cover the central Mediterranean, as is exemplified by the map for 31 Jan. On 1 February a pronounced plume, combined with lack of clouds, will develop and extend toward Crete region.

**Dust plumes over the Atlantic:** On both 30 and 31 January the only significant plume is that extending from Africa along 5N latitude (see below). On 30 January the main plume will extend down to 20W, and another dust cloud, detached from the main one, will extend along the equator between 30-40W lon. On 31 January both plume will weaken slightly and the western cloud will extend between 25-50W.



MSG 226 - BLUE FD16 MEIDEX OPS



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## MSG 226 - BLUE FD16 MEIDEX OPS

**Yoya's Message:** The final installments....

**STS- 107 has reached Stage 4.**

**[1] Theory:** You know it all but nothing functions.

**[2] Stage 2: Practice.** All functions but nobody knows why.

**[3] Stage 3: Theory and Practice Cross.** Nothing functions and nobody knows why.

**[4] Stage 4: Theory and Practice Meet.** All functions and some think they know why.

### **Yoya – A Self Portrait**

I am trying to emulate Ogden Nash,  
But my best efforts turn to ash.  
If I try to write like Robert Burns,  
My efforts bring on stomach burns.  
And yet, poor little dope,  
I hope just a smile to evoke.

### **To My Friends In the Sky (paraphrasing the Bard)**

When shall we all meet again  
In thunder, lightning or in rain  
When the sprites are lost and won  
When the dust is settled and gone  
And the shuttle is still and alone

### **FD16 Operations Message**

**MX Playback:** 14/19:45 – 14/20:15

**MX XFERS:** 14/22:30

**MX PGSC SETUP (sts 5&6):** To be scheduled on Red FD16

**Standalone Door Ops:** None

**Digital TV Instructions:** To be requested when Ku downlink is available

- 1) The Blue and Red ops messages will be divided into two parts, one for each shift.
- 2) For error messages, select "OK" to ignore on MEIDEX PGSC (as many times as required). Notify MCC and perform MEIDEX PGSC Reboot per MSG 149.
- 3) We are getting close to the end of the flight, and also close to the end of our internal payload VCR recording capability, so we will be modifying our payload VCR philosophy as follows: we would like you to record only when you see a plume and for no more than 3 minutes per plume. If you see multiple plumes during a single observation, you may record each independently. If you see substantial dust activity, you are go to record for longer periods on MCC GO.
- 4) There is an update for the Step 4 of the science procedure for your two remaining Sprites. We will nominally be commanding this from the ground, however we have included the marked up step in this message for your reference.

## MSG 226 - BLUE FD16 MEIDEX OPS

### Procedure Update

The POCC will nominally execute Step 4 for observations on FD16. If you are required to take over, use the following update for Step 4 in place of MEIDEX SCIENCE, Step 4 (PLOPS, 1-74).

### MEIDEX SCIENCE Step 4 Update

#### 4. XYBION CAMERA CONFIG

√ Execute Package for Payload Setup

Sel XybCmd (brings up XybionCmdForm display)

Sel XybionTIm (brings up Xybion Camera display)

Perform following PGSC cmds and checks per table:

#### NOTE

Press Xmit button to transmit each cmd in table below

Command/Check	PAYLOAD SETUP		
	ROI	MOON CAL	SPRITE
Lock	Run	Run	5 (√ L 5)
Gain	65 (√ G 65)	65 (√ G 65)	Before T Time: 65 (√ G 65)
			At SS (T Time): 90 (√ G 90)
			At SR (end): 65 (√ G 65)
Exposure Video Mode	Peak Video (√ EVP)	Peak Video (√ EVP)	Average Video (√ EVA)
Configuration Peak Video Level	180 (√ C P 180)	120 (√ C P 120)	
Configuration Average Video Level			180 (√ C V 180)
Report Current Settings	√ T C	√ T C	√ T C
On Xybion Camera Display, wait 30 sec (until IMC > appears)			
Target Levels, Peak	√ 180	√ 120	
Target Levels, Average			√ 180

## MSG 226 - BLUE FD16 MEIDEX OPS

### Orbit # 235

Observation type: Sprite  
 Storm Center: 15S/160E. Storms will be north of orbit track. Attitude bias of 60 Deg. N has been implemented to better view the area of activity.  
 Video: Live SSV; Recorded on V10 #1 and #2  
 Special Instructions: 1) Storms near the limb are preferable for pointing  
 2) Do not command gain to 90 until T Time.  
 3) Step 4 of science has been updated to reflect changes in the instrument configuration. This step will nominally be ground commanded; if you are required to take control, utilize the updated Step 4 from this ops message.

**Violations: RAM at 16:40**

Start	Procedure	Instructions	R/NR	CMD	Notes
14/15:00	MEIDEX SETUP	Step 4 (TLM Config)	REQ	POCC	
		Step 5 (Event Log Config)	REQ	POCC	
		Step 6 (PLD VCR Act.)	NR	POCC	
		Step 7 (Sekai Activation)	REQ	POCC	
14/15:10	MEIDEX SETUP	<b>Step 1 (Timer Setup)</b>	<b>REQ</b>	<b>Crew</b>	
		<b>Step 2 (PTV Check)</b>	<b>REQ</b>	<b>Crew</b>	
		<b>Step 3 (Tape Verification)</b>	<b>REQ</b>	<b>Crew</b>	
	<b>MX PGSC Reboot</b>	<b>Reference Msg 149</b>	<b>REQ</b>	<b>Crew</b>	
14/15:15	XYBION ACTIVATION	Step 1 (Xybion Powerup)	REQ	POCC	
		Step 2 (Time/Date Config)	REQ	POCC	
14/15:20	MEIDEX SCIENCE	Step 4 (Xyb Cam Config)	REQ	POCC	Setup = Sprite Gain = 65 EVA = 180
		Step 6 (Truss Pntg Config)	REQ	POCC	Truss = 0
14/15:30	MEIDEX SCIENCE	<b>Step 1 (Xyb Pwr Check)</b>	<b>REQ</b>	<b>Crew</b>	
		<b>Step 2 (Xyb T/D Check)</b>	<b>REQ</b>	<b>Crew</b>	
		<b>Step 3 (Door Open)</b>	<b>REQ</b>	<b>Crew</b>	<b>NLT 14/15:35</b>
		Step 4 (Xyb Cam Config)	NR	--	Already cmded
		<b>Step 5 (Mon 2 Checks)</b>	<b>REQ</b>	<b>Crew</b>	<b>Setup = Sprite Gain = ~65</b>
		Step 6 (Truss Pntg Config)	NR	--	As required to track sprites
		<b>Step 7 (In Cabin Record)</b>	<b>REQ</b>	<b>Crew</b>	<b>No Downlink</b>
		Step 8 (PLD VCR act)	NR	--	
14/15:41	T Time	<b>Step 9 (Observation)</b>	<b>REQ</b>	<b>Crew</b>	<b>Cmd Gain to 90 (per MSG 226 Step 4 update). Mnvr truss as reqd to track storms near limb</b>
14/16:17	MEIDEX SCIENCE	Step 10 (PLD VCR Stop)	NR	--	
		<b>Step 11 (In Cabin Stop)</b>	<b>REQ</b>	<b>Crew</b>	
		<b>Step 12 (PTV PWRDN)</b>	<b>REQ</b>	<b>Crew</b>	
		<b>Step 13 (Door Close)</b>	<b>REQ</b>	<b>Crew</b>	<b>NLT 14/16:38</b>
		Step 14 (PLD VCR Swap)	NR	--	
		Step 15 (Status Check)	REQ	POCC	Cmd Gain to 65
		Step 16 (Truss Reconfig)	REQ	POCC	
14/16:20	MX CLOSEOUT	Step 2 (Sekai Deact)	REQ	POCC	
		Step 3 (Xybion Deact)	REQ	POCC	
14/16:40	RAM Violation	<b>Door must be closed</b>			